The genetics clinic: where does the time go?

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Although the specialty of medical genetics has evolved in recent years to a recognized medical specialty with a seat at the table of organized medicine, one might argue that the practice of genetics in the clinic has not changed considerably over the same time period. Although we are rapidly entering a time when the need for clinical genetics services is expanding because of advances in genomics, pharmacogenomics, and molecular diagnostic testing, there are relatively few clinical geneticists available to meet this need. With decreasing numbers of medical genetics trainees entering the field, an analysis of workflow in the genetics clinical setting is especially important to help define the time required to provide appropriate clinical services. A necessary first step in this process is to understand exactly what takes place during that time.

Genetics workforce and workflow studies

Although there have been several attempts since 1987 to define time spent by clinical geneticists in the clinic,^{1–4} they have been difficult to interpret and none has conclusively answered the simple question of how many patients a clinical geneticist can be expected to see and care for. There are many reasons for this. There are relatively few clinical geneticists in practice compared with other specialties and we generally practice in academic medical institutions and have a variety of responsibilities in addition to clinical duties, including research, education, administration, and directing clinical laboratories. The MD geneticists surveyed in earlier studies spent anywhere from 10–90% of their time in the clinic, with some working alone and others with genetic counselors and/or nurses—all factors that could influence efficiency. Some studies included prospective estimates of time spent on clinical services, whereas others were retrospective. Some included only physician time, whereas others included genetic counselor time making it difficult to compare studies. However, all concluded that the time required for a geneticist to care for a patient (1–7 hr/new patient; 0.5–4.0 hr/return patient) was far in excess of what could be billed for and reimbursed. Given that many of these studies were retrospective and included wide ranges of time estimates, it was difficult to know what

could potentially be changed to eliminate redundancy and increase efficiency.

In an attempt to answer this question, McPherson and colleagues (see page 699) in this issue report the first real-time documentation of workflow in a general genetics clinic that uses MD geneticists and genetic counselors to see all patients. Their findings are remarkably similar to surveys performed 20 years earlier, and conclude that it takes approximately 7 hours of combined MD/counselor time to care for a new patient and 3.5 hours for a follow-up patient. Approximately 60% of the total time was not in direct patient care, but was described as consisting of “patient related activities” and this portion of the physician time and all of the counselor time was not billable by today’s reimbursement standards. Stated in another way, only 15% of the time spent on patient care was billable with the potential for reimbursement. And herein lies the problem. This practice model that is common to our specialty has little hope of sustaining itself financially and even less hope of being able to handle the increasing number of patients who will need the services of medical geneticists in the future.

Patient-related activities: What are they and how can they be managed?

None would argue that the practice of medical genetics requires seeing increasingly complex patients with rare conditions that require specialized testing, long explanations of genetic tests requiring informed consent, and long genetic counseling sessions. Perhaps the time spent in direct face-to-face patient contact cannot and should not be decreased to avoid adversely affecting patient care. However, we need to examine the other patient-related activities that occur outside of the clinic visit and determine whether they are necessary components of patient care, and if so, whether they can be done more efficiently and who should perform them. The current report begins to define these activities. These include the documentation of a three-generation family history, medical record reviews of the patient and family members, review of patient and family photographs, examination of family members, literature reviews of rare conditions, the ordering of molecular genetic tests and the documentation and insurance approval process that accompanies this, and dictation and review of summary letters to referring physician and families.

We need to begin to analyze these activities and determine if they are necessary, and if so, how best to do them in the most efficient manner. At first glance, it seems that the answers to some of these questions may be present in the different clinical practices of our colleagues at different institutions who responded to the survey reported by Pletcher et al.³ which reported a weekly average of 3.1 hour/new patient and 1.7 hours/

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Disclosure: The author declares no conflict of interest.

Submitted for publication June 30, 2008.

Accepted for publication June 30, 2008.

DOI: 10.1097/GIM.0b013e3181853048

follow-up patient. We need to determine which services require a physician and which services can be performed by genetic counselors or nurses working closely with MD geneticists in the clinical setting.

Some of these problems are beyond our control, such as being able to bill for genetic counseling services, or simplifying the process of ordering molecular genetic tests to that of ordering blood chemistries. Others are problems of our own making that can be solved with a little effort and by looking outside of the box in which we were trained. Can patients be more appropriately scheduled based on their chief complaint—does every new patient need the same amount of time set aside for them? Should family members be examined at separate visits billed in their names? Are separate letters to the families necessary for each visit? Should all laboratory results be given at separately billed follow-up visits since documentation of this counseling is necessary? Geneticists see fewer follow-up patients than other specialists and many still practice on a single visit consultation model.⁵ Because we provide clinical information regarding results and implications of laboratory results, this should be done as part of a billable visit and not a nonbillable phone call. Is it still financially reasonable for a geneticist to be part of a multi-specialty clinic where he/she might only see one to two patients in a session but provides genetics consultation to the different specialty groups? Who should pay for the geneticist's time during these sessions: the Genetics Division, or the other medical or surgical department that requests the presence of the geneticist who provides consultation and teaching to their faculty and trainees. If genetic counselors or nurses are members of the clinic, is there redundancy in the services provided by them and the MD geneticist—are both reviewing the history, counseling, and answering questions? And finally, is there any difference in health outcome for patients seen in clinical settings that use different practice models?

Next steps

Many of us were drawn to clinical genetics not only because of the patients that we see, but because we have the ability to

teach, participate in research, and work in clinical laboratories. Becoming more efficient in the clinical setting will allow us to continue to do all of this and to see the increasing numbers of patients that we will be called on to care for in the future. This will lead to increased clinical revenue and decreased wait time to new appointments, making patients, referring physicians, and even department chairs happy.

Being a small community may have its drawbacks in terms of workforce allocation, but it also has its advantages in bringing together clinicians who are interested in beginning to address these issues. The discrepancy reported in time required to see patients in the genetics clinic in the recent workforce surveys indicates that there are different models of care already being practiced in our community. Bringing the interested parties together to discuss the development of tools such as electronic family history and clinic visit forms, patient information sheets regarding genetic testing and common genetic conditions, and letter templates, would increase efficiency without compromising care. We are the group to define the standard of care for our patients in the clinic, while the leaders of the College continue in their effort to maximize reimbursement for our services. McPherson and colleagues⁶ have begun this process. It would be a shame not to continue it.

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